

**REMARKS**

Claims 1-26 are pending.

Claim 16 is editorially amended to depend on claim 15 to provide an antecedent "adhesive layer" which cannot be found in claim 1.

New claim 20 is supported by page 11, line 6 and Examples 1 and 2 of the specification.

New claim 21 is supported by page 14, lines 11 to 17 and page 18, lines 17 to 21 of the specification.

New claims 22 and 26 are supported by page 20, lines 2 to 3 of the specification.

New claim 23 is supported by page 18, lines 23 to 24 of the specification.

New claim 24 is supported by Example 2 (page 29) of the specification.

New claim 25 is supported by page 18, lines 17 to 21 of the specification.

No new matter has been added in the above-amendment. Entry of above amendments is respectfully requested.

**Specification**

The Examiner objects to the language in the abstract. In response, Applicants have amended the Abstract for clarity. Reconsideration and withdrawal of the objection is respectfully requested.

**Prior Art Based Issues**

The following Rejections (A)-(D) are pending:

(A) Claims 1-3, 6-10, 13, and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Arakawa, US 5,189,538, ("Arakawa '538");

(B) Claims 5 and 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Arakawa '538;

(C) Claims 4, 11-12, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arakawa '538 in view of Arakawa, US 2002/0005925 A1 ("Arakawa '925"); and

(D) Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arakawa '538 in view of Sasaki (US 2003/0067574 A1).

Applicants respectfully traverse Rejections (A)-(D).

The subject matter of present claim 1 is as follows:

An optical laminate (optical laminate C) which comprises a layer (layer A) comprising a resin having a negative intrinsic birefringence and at least one layer (layer B) comprising a transparent resin, having substantially no orientation and laminated at least on one face of layer A and satisfies a relation  $|Re(A)| > |Re(B)|$ , wherein  $Re(A)$  and  $Re(B)$  represent an in-plane retardation of layer A and an in-plane retardation of layer B, respectively, measured with light having a wavelength of 400 to 700 nm.

Whereas, in the ABSTRACT of Arakawa '538 the following is disclosed:

A liquid crystal display comprising a liquid crystal cell and a polarizing sheet is disclosed, in which (A) at least one film having light transmission properties, said film (A) having at least one optic axis at an angle of not more than 45° with the normal thereof or satisfying the relationship

$$\eta_{TH} - (\eta_{MD} + \eta_{TD})/2 > 0$$

wherein  $\eta_{TH}$  is a refractive index in the normal direction;  $\eta_{MD}$  is a refractive index in the machine direction;  $\eta_{TD}$  is a refractive index in the transverse direction, and (B) at least one uniaxially stretched film of a polymer having a positive intrinsic birefringence and light transmission properties are inserted between the liquid crystal cell and the polarizing sheet. Viewing angle dependence of retardation of the display can be eliminated, and the display has markedly wide ended viewing angle.

The following is stated in the first paragraph of item No. 7. on page 3 of the Office Action:

**Arakawa teaches with respect to Claim 1**, the claimed optical laminate (optical laminate C) (*Abstract, lines 1-10, and Figure 1 and Figure 2, layer "A" and layer "B," vide infra*) which comprises a layer (layer A) comprising a resin having a negative intrinsic birefringence (*Figure 1, layer "A," see Col. 2, lines 20-23, Col. 5, lines 7-55*) and the claimed at least one layer (layer B) comprising a transparent resin (*polycarbonate, considered to be a transparent resin, Figure 1, layer "B," see Col. 4, line 63 through Col. 5, line 6*) and the claimed laminated at least on one face of layer A (*Figure 1, Col. 6, line 60*) and satisfies a relation  $|\text{Re}(A)| > |\text{Re}(B)|$ , wherein  $\text{Re}(A)$  and  $\text{Re}(B)$  represent an in-plane retardation of layer A (*569 nm, Example 3, Table 1, Col. 9, line 28*) and an in-plane retardation of layer B (*560 nm, Example 1, Col. 6, line 59*), respectively, measured with light having a wavelength of 400 to 700 nm (*632.8 nm, Col. 6, line 66*). The light wavelength range as claimed by the applicant in the instant claim

overlaps the light wavelength as taught by Arakawa. (*Emphasis by underlining added*).

As noted in the above-quoted passage of the Examiner, the Examiner has determined that the in-plane retardation of layer A in EXAMPLE 3 of Arakawa '538 is 569 nm. However, it is unclear to Applicants how the Examiner has made this determination. It may be possible that the value "569 nm" was taken from the values of retardation at the angle of inclined incident light of  $0^\circ$  in both  $\alpha$  and  $\beta$  directions from the data shown in the column of "EXAMPLE 3" in Table 1 of Arakawa '538. However, the data of retardations shown in the column of "EXAMPLE 3" in Table 1 are retardations for the laminate of two polystyrene films ("Denka Styrol MW-1") and the PC film as obtained in EXAMPLE 2 (see column 8, lines 21 to 21 and lines 40 to 41 of Arakawa '538) but not those for the polystyrene film only. Thus, there is first of all a serious misreading of the teachings of Arakawa in taking the data for retardation of a laminate as the retardation of the polystyrene film constituting the laminate.

In the specification of Arakawa '538, there are disclosed some of the refractive indices of the films used in EXAMPLES and COMPARATIVE EXAMPLES, but not for all of the films used in each of EXAMPLES and COMPARATIVE EXAMPLES. Arakawa '538 does not disclose refractive indices of the films used in some of EXAMPLES and COMPARATIVE EXAMPLES. Therefore, it is not possible to calculate all of the retardations of each of the films used in the EXAMPLES from the description in EXAMPLES of Arakawa '538. While, Arakawa '538 discloses in Table 1 optical properties corresponding to each of EXAMPLES and COMPARATIVE EXAMPLES. From Table 1 of Arakawa '538, one can figure out the angle dependence of in-plane retardation as per inclined incident light for all of the films used in EXAMPLES and COMPARATIVE EXAMPLES except for the data obtained in COMPARATIVE EXAMPLES 6 and 7. It is considered that the data for COMPARATIVE EXAMPLES 6 and 7 are missing from TABLE 1 in Arakawa '538 in the translation process of

JP 2-256023 (Application No. JP 1-236493) on which Arakawa '538 claims priority. For confirmation by the Examiner, Applicants reproduced a portion of TABLE 1 not contained in Arakawa '538 but contained in JP 2-256023 together with the translation of the notes for " $\alpha$ " and " $\beta$ " directions described in the margin under TABLE 1 (see Annex 1: page 8 of JP 2-256023 which is already on file. The framed portion was translated hereinunder)

Portion of TABLE 1 of JP 2-256023

Angle Dependence of Retardation and Angle of Optic Axis

	Film	Angle of Inclined Incident Light			Retardation Ratio (40°/0°)	Angle of Optic Axis with Normal
		0°	20°	40°		
Comp.	$\alpha$ -direction	0	-39	-120	-	0°
Ex. 6	$\beta$ -direction	0	-40	-118	-	
Comp.	$\alpha$ -direction	382	396	640	1.10	-
Ex. 7	$\beta$ -direction	383	343	528	0.91	-

\* $\alpha$ -direction: The pass of monochromatic incident light is present on a plane perpendicular to the stretching axis in a uniaxially stretched film and the angle formed with the direction of normal of the film is made as the angle of inclined incident light.

\*\* $\beta$ -direction: When the pass of monochromatic incident light is inclined from the direction of normal to a film plane toward the direction of the stretching axis, the angle of the inclined incident with the direction of the normal is made as the angle of inclined incident light.

Now, it is a common knowledge in the art that when one refers to an in-plane retardation, it is meant to be a in-plane retardation in the front direction, namely, the value at 0° of inclined incident light. Therefore, it is considered to be appropriate to use the values of retardations at 0° of inclined incident light in Table 1 of Arakawa '538 as the in-plane retardation. The discussions hereinunder will refer to the values of retardations at 0° of inclined incident light as the in-plane retardation.

The in-plane retardations of the polystyrene film used in EXAMPLE 3 of Arakawa '538 are given in the column of "COMPARATIVE EXAMPLE 5" in Table 1 and are 0 nm at the angle of inclined incident light of  $0^\circ$  in both  $\alpha$  and  $\beta$  directions and not "569 nm" as alleged in the Office Action. The retardations of the polycarbonate film obtained in EXAMPLE 2 and used in Example 3 are disclosed in the column of "COMARATIVE EXAMPLE 3" and 569 nm and 568 nm at the angle of inclined incident light of  $0^\circ$  in  $\alpha$  and  $\beta$  directions, respectively. In the presently claimed invention, the optical laminate comprises layer A comprising a resin having a negative intrinsic birefringence and at least one layer B comprising a transparent resin having substantially no orientation. It is clear that the polystyrene films used in EXAMPLE 3 of Arakawa '538 corresponds to layer A and the polycarbonate film used in EXAMPLE 3 which is obtained in EXAMPLE 2 corresponds to layer B of the presently claimed invention from the disclosures in column 5, lines 14 to 25 of Arakawa '538 with respect to the polymer having a negative intrinsic birefringence and column 4, line 63 bridging to column 5, line 6 of Arakawa '538 with respect to the polymer having a positive intrinsic birefringence, respectively. It follows therefore, in EXAMPLE 3 of Arakawa '538, the polystyrene films correspond to layer A of the presently claimed invention and polycarbonate film corresponds to layer B of the presently claimed invention. Thus, the retardation of the polystyrene films ( $Re(A)$ ) is 0 nm and the retardation of the polycarbonate film ( $Re(B)$ ) is 569 nm or 568 nm as set forth above. Namely, the relation between  $|Re(A)|$  and  $|Re(B)|$  is expressed by  $|Re(A)| < |Re(B)|$  which cannot satisfy one of the very important features of the presently claimed invention, that is that  $|Re(A)| > |Re(B)|$ . Furthermore, the polycarbonate film in EXAMPLE 3 of Arakawa '538 has a retardation of  $Re(B) = 569$  nm or 568 nm, which means that there is no doubt the film is substantially oriented. This can be confirmed by the criteria of the term "substantially oriented" as set forth in the specification, the equation: the value of  $|(n_{AX}-n_{AY})d_A| + |(n_{BX}-n_{BY})d_B|$  is 1.1 times the value of  $|(n_{AX}-n_{AY})d_A|$  or smaller. It is a common knowledge in the art that  $|(n_{AX}-n_{AY})d_A| = Re(A)$  and

$|(n_{BX}-n_{BY})d_B| = \text{Re}(B)$ . Therefore,  $|(n_{AX}-n_{AY})d_A| + |(n_{BX}-n_{BY})d_B| = \text{Re}(A) + \text{Re}(B) = 0 + 569$  (or  $568$ )  $= 569$  (or  $568$ ). Whereas 1.1 times the value of  $|(n_{AX}-n_{AY})d_A|$  is 1.1 times 0, namely, 0. It follows, therefore, the value of  $|(n_{AX}-n_{AY})d_A| + |(n_{BX}-n_{BY})d_B|$  is larger than 1.1 times the value of  $|(n_{AX}-n_{AY})d_A|$  in EXAMPLE 3 of Arakawa '538. Thus, the polycarbonate film (layer B) in EXAMPLE 3 of Arakawa '538 does not satisfy another very important feature of the presently claimed invention, the layer B "having substantially no orientation". In fact, Arakawa '538 discloses that all of the PC films or polyarylate films in EXAMPLES 1 to 5 are uniaxially oriented.<sup>1</sup>

<sup>1</sup> As mentioned above, layer B is described in present claim 1 as having "substantially no orientation." Herein, Applicants have used the retardation values given in Table 1 of Arakawa '538. However, Applicants note that the values given at Table 1 of Arakawa '538 are not consistent, and Applicants are puzzled as to the cause of this inconsistency. At page 12, first full paragraph of the present specification, the phrase "having substantially no orientation" is defined as the difference in the refractive index in the x-direction  $n_{BX}$  and the refractive index in the y-direction  $n_{BY}$  which are perpendicular to each other in layer B is small and the value of  $|(n_{AX}-n_{AY})d_A| + |(n_{BX}-n_{BY})d_B|$  is 1.1 times the value of  $|(n_{AX}-n_{AY})d_A|$  or smaller when the refractive index in the x-direction and the refractive index in the y-direction which are perpendicular to each other in layer A are represented by  $n_{AX}$  and  $n_{AY}$ , respectively, the thickness of layer A is represented by  $d_A$ , and the thickness of layer B is represented by  $d_B$ . As such, it is possible to calculate the values of  $|(n_{AX}-n_{AY})d_A| + |(n_{BX}-n_{BY})d_B|$  and the values of  $|(n_{AX}-n_{AY})d_A|$  from the data of  $n_{AX}$ ,  $n_{AY}$ ,  $d_A$ ,  $n_{BX}$ ,  $n_{BY}$ , and  $d_B$  disclosed in Arakawa '538 and compare the calculated values of  $|(n_{AX}-n_{AY})d_A| + |(n_{BX}-n_{BY})d_B|$  with 1.1 times the calculated values of  $|(n_{AX}-n_{AY})d_A|$  as defined in the specification. However, these refractive indices data are not disclosed for all of the films used in EXAMPLES and COMPARATIVE EXAMPLES in Arakawa. After Applicants reviewed the disclosure of Arakawa '538, it was found that the data applicable for calculating the equations set forth above were found only in EXAMPLE 1 of Arakawa. The results of the calculations are illustrated below.

#### EXAMPLE 1

##### PS film ( corresponding to layer A of the present invention)

thickness $d_A$	150 $\mu\text{m}$ (150000nm)
refractive index	
(machine direction) $\eta_{MD}$ ( $n_{AX}$ )	1.543
(traverse direction) $\eta_{TD}$ ( $n_{AY}$ )	1.542
$ (n_{AX}-n_{AY}) $	0.001
$ (n_{AX}-n_{AY})d_A $	<u>150nm</u>
$1.1 (n_{AX}-n_{AY})d_A $	<u>165nm</u>

##### PC film ( corresponding to layer B of the present invention)

thickness $d_B$	68 $\mu\text{m}$ (68000nm)
refractive index	
(machine direction) $\eta_{MD}$ ( $n_{BX}$ )	1.591
(traverse direction) $\eta_{TD}$ ( $n_{BY}$ )	1.582

It is believed that the above-discussion should clarify the disclosure of Arakawa '538, and as such, the Examiner is respectfully requested to reconsider the Examiner's conclusion that layer B as taught by Arakawa '538 meets the requirement of the present claims (see page 5, lines 6 to 7 of the Office Action). The same analysis were made with respect to the laminate the laminate or combination of the films disclosed in EXAMPLES 1, 2, 4 and 5 of Arakawa '538. The results are summarized as follows.

EXAMPLE 1: Re (A)=15 (or -13) nm; Re (B)=561 (or 560) nm

EXAMPLE 2: Re (A)=21 (or -22) nm; Re (B)=569 (or 568) nm

EXAMPLE 4\*: Re (A)=0 nm; but cannot be compared with the optical laminate as defined in claim 1 of the present invention (see the footnote). In any regard, however it is clear that the relation:  $| \text{Re}(A) | > | \text{Re}(B) |$  can not be satisfied, since  $\text{Re}(A)=0$ .

EXAMPLE 5\*: Re (A)=0 nm; Re (B)=582 (or 583) nm

\*Note: This data is not shown in Arakawa '538 but shown only in JP 2-256023 (Application No. JP 1-236493) on which Arakawa '538 claims a priority (see above).

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$  (n_B x - n_B y)  $	0.009
$  (n_B x - n_B y) d_B  $	<u>612nm</u>
$  (n_A x - n_A y) d_A   +   (n_B x - n_B y) d_B  $	<u>762nm</u>
$  (n_A x - n_A y) d_A   +   (n_B x - n_B y) d_B   (=762) > 1.1   (n_A x - n_A y) d_A   (=165)$	

From the calculation illustrated above, it is clear that the laminate of PS film and PC film or combined use of PS film and PC film disclosed in EXAMPLE 1 of Arakawa do not satisfy the requirement in the specification, i.e., the value of  $| (n_A x - n_A y) d_A | + | (n_B x - n_B y) d_B |$  is 1.1 times the value of  $| (n_A x - n_A y) d_A |$  or smaller.

In EXAMPLE 4, two uni-axially oriented PS films are inserted between an STN liquid crystal cell and an analyzer in such a manner that the stretching axes were at right angles and a PC film obtained in EXAMPLE 1 is inserted between the liquid crystal cell and a polarizing sheet. As the presently claimed invention relates to a laminate of layer A and layer B and such laminate cannot be compared with the quite different embodiment using two PS films and a PC film.



It is noted for confirmation that the data of retardations for Ex. 1 to 5 shown in TABLE 1 are those for the laminates comprising one or two layers of polystyrene resins as film (A) having at least one optical axis at an angle of not more than  $45^\circ$  from normal thereof or satisfying the relationship  $\eta_{TH} - (\eta_{MD} + \eta_{TD})/2 > 0$  and a PC film (Ex. 1 to 4) or a polyarylate film (Ex. 5) as (B) uniaxially stretched film of a polymer having a positive intrinsic birefringence and light transmission properties, but not for those for individual films constituting the laminate (see column 6, 66 to 68; column 7, lines 48 to 49; column 8, lines 31 to 33; column 8, lines 55 to 57; and column 9, lines 22 to 23). Whereas the data for the retardation values for Comp. Ex. 1 to Comp. Ex. 5 shown in TABLE 1 of Arakawa '538 and Comp. Ex. 6 and 7 in TABLE 1 of JP 2-256023 are those for the individual films of (A) or (B) which constitute the laminates of Ex. 1 to 5. Since Arakawa '538 discloses to use a combination of (A) at least one film having light transmission properties as defined above and (B) at least one uniaxially stretched film of a polymer having a positive intrinsic birefringence and does not teach or suggest to use only two or more films of (A) or (B) without combining each other, respectively, the possible combinations of (A) and (B) shown in TABLE 1 including the data of Table 1 in JP 2-256023 are combinations of Comp. Ex. 2, 4, 5 and 6 (PS film) with Comp. Ex. 1, 3 (PC film) and 7 (polyarylate film).

Thus, in all of the EXAMPLES of Arakawa '538, the relations between  $|\text{Re}(A)|$  and  $|\text{Re}(B)|$  are expressed by  $|\text{Re}(A)| < |\text{Re}(B)|$  and the requirement defined in the presently claimed invention,  $|\text{Re}(A)| > |\text{Re}(B)|$  cannot be satisfied. At the same time, the requirement: the layer B "having substantially no orientation" cannot be satisfied in EXAMPLES 1, 2, 4 and 5 of Arakawa '538 in the same manner as set forth above with respect to EXAMPLE 3 of Arakawa '538.

It is clear from the discussions set forth above that the two very important features of the present invention, namely,  $|\text{Re}(A)| > |\text{Re}(B)|$  and layer B having substantially no orientation are

not satisfied by the laminate or the combinations of films disclosed in any of the EXMPLES 1 to 5 of Arakawa '538, even if the data for COMPARATIVE EXAMPLES 6 (Polyarylate film) and 7 (a film laminate comprising the two uniaxially stretched polystyrene films) are taken in consideration.

It is further noted that there is serious confusion in the Examiner's description about the features defined in claim 1 by the phrase, "layer B having substantially no orientation" beginning from page 4 bridging to page 5 of the Office Action in applying the data disclosed by Arakawa '538 to the equation: the value of  $|(n_{AX}-n_{AY})d_A|+|(n_{BX}-n_{BY})d_B|$  is 1.1 times the value of  $|(n_{AX}-n_{AY})d_A|$  or smaller which is disclosed in the specification.

First, the Examiner appears to be confused in the Office Action by picking out data of individual films, which are obtained in different Examples which Arakawa '538 does not teach to be combinable. The definition set forth above which is disclosed in the present invention is applicable to a layer A and B in an optical laminate of the presently claimed invention. In this sense, column 8, line 19 relates to the PS film in EXAMPLE 3, while column 6, line 59 relates to the thickness of the PC film obtained in EXAMPLE 1 of Arakawa '538, respectively. Arakawa '538 does not disclose in the EXAMPLES that the PS film in EXAMPLE 3 and the PC film in EXAMPLE 1 can be combinable to obtain the polarizing plate.

Second, the Examiner appears to be confused in that the thickness of films of layers A and B and the values for  $|(n_{AX}-n_{AY})d_A|$  or  $|(n_{BX}-n_{BY})d_B|$  are chosen by the Examiner from data for different films. For example, while the thickness disclosed in column 8, line 19 is for the PS film obtained in EXAMPLE 3, the values of  $\eta_{MD}$  and  $\eta_{TD}$  disclosed in column 7, line 22 of Arakawa '538 are for the PC film in EXAMPLE 1. Similarly, while the thickness disclosed in column 6, line 59 of Arakawa '538 is for the PC film obtained in EXAMPLE 1, the values of  $\eta_{MD}$  and  $\eta_{TD}$  disclosed in column 8, line 34-35 of Arakawa '538 are for the PS film in

EXAMPLE 3. It is quite meaningless to use a thickness of a film in one EXAMPLE and the values of  $\eta_{MD}$  and  $\eta_{TD}$  of a different film in another EXAMPLE.

Third, there appears to be confusion in that the Examiner is applying the data of thicknesses and the values of  $\eta_{MD}$  and  $\eta_{TD}$  to the equation in the specification. The values taught in column 7, line 22 of Arakawa '538 are for the PC film as set forth above. Therefore, the equation to which the values are applied should be  $|(n_{BX}-n_{BY})d_B|$  instead of  $|(n_{AX}-n_{AY})d_A|$ .

Similarly, the values of  $\eta_{MD}$  and  $\eta_{TD}$  disclosed in column 8, line 34-35 of Arakawa '538 are for the PS film as set forth above. Therefore, the equation to which the values should be applied are  $|(n_{AX}-n_{AY})d_A|$  instead of  $|(n_{BX}-n_{BY})d_B|$ . However, regardless of this confusion, none of the combinations of the individual films disclosed in EXAMPLES 1 to 5 of Arakawa '538 corresponding to layer A and layer B of the presently claimed invention can satisfy the two important requirements set forth above even in a combination of films in different EXAMPLES, since the values of  $Re(B)$  is large as compared to the values of  $Re(A)$  in all of the EXAMPLES.

From the discussions set forth above, Arakawa '538 does not teach or suggest at least two very important features, " $|Re(A)| > |Re(B)|$ " and "(layer B)..., having substantially no orientation" defined in presently claimed invention. The subject matter of the presently claimed invention is distinguished clearly from that taught by Arakawa '538. The presently claimed invention is attained by a distinguishably different way from the invention taught by Arakawa '538 and is not only new but also non obvious over Arakawa '538. As such, significant patentable distinctions exist between the presently claimed invention and the teachings of Arakawa '538.

It is respectfully submitted that inventive claim 2 is further distinguished from Arakawa '538. However, the Examiner asserts that since the polymer film of Arakawa '538 must have essentially the same physical characteristics as the polymer film of the instant application, it

would be expected that the film as taught by Arakawa '538 will have essentially the same retardation ( $|Re(B)|$ ) of 20 nm or smaller as presently claimed (see lines 1 to 4 on page 6 of the Office Action).

Applicants respectfully disagree. This assertion by the Examiner is contrary to the disclosure of Arakawa '538. The values of  $|Re(B)|$  disclosed in the EXAMPLES or COMPARATIVE EXAMPLES of Arakawa '538, which are taken at the angle of inclined incident light of  $0^\circ$  in both the  $\alpha$  and  $\beta$  directions, fall within the range of 560 to 569 nm for the polycarbonate film and is 582 (or 583) nm for polyarylate film even when the data disclosed in JP 2-256023 is taken into consideration. Thus, Arakawa '538 fails to teach or suggest the feature of claim 2,  $|Re(B)|$  is 20 nm or smaller. As such, it cannot be said that the polymer film of Arakawa '538 must have essentially the same physical characteristics as the polymer film of the instant application at least in the film corresponding to the layer B of the present invention.

With respect to claims 3, 6-10, 13, and 17-18, as these claims directly or indirectly depend on claim 1, these claims are considered to be distinct from the teachings of Arakawa '538, for the same reasons as set forth above.

With respect to claims 5 and 14, these claims are included in Rejection (B), i.e., under 35 USC 103(a) as being unpatentable over Arakawa '538.

Applicants respectfully disagree with Rejection (B) for the following reasons.

Both of claims 5 and 14 directly depend on claim 1 which Applicants consider to be unanticipated or non-obvious over Arakawa '538 for the arguments set forth above. Therefore, claims 5 and 14 are considered to be non-obvious. It appears that the Examiner misunderstands the meaning of  $\Sigma n_x$ ,  $\Sigma n_y$  and  $\Sigma n_z$ . These are not the refractive indices as set forth in the first paragraph of item No. 9. on page 9 of the Office Action but are as defined in page 16, lines 8 to 10 of the specification. As such, Rejection (B) is not tenable.

With respect to claims 4, 11-12, and 15-16, these claims are included in Rejection (C), which is a rejection under 35 USC103(a) as being unpatentable over by Arakawa '538 in view of Arakawa '925.

Applicants respectfully disagree with the rejection for the following reasons.

Applicants consider that claim 1 is unanticipated or unobvious over Arakawa '538 from the arguments set forth above. Therefore, the subject matters of claims 4, 11-12, and 15-16 are also unobvious over Arakawa '538 in view of Arakawa '925.

Furthermore, particularly with respect to claim 4, Arakawa '925 teaches away from using a retardation plate satisfying the relational expression of  $\text{Re}(450) > \text{Re}(550) > \text{Re}(650)$  which is disclosed in Comparative Examples 7 and 8, the result of which is shown in FIG. 9. The essence of Arakawa '925's invention is in a retardation plate satisfying the relational expression of  $\text{Re}(450) < \text{Re}(550) < \text{Re}(650)$  which is quite contrary to the requirement defined in claim 4. In addition, Arakawa '925 discloses that the films in Comparative Examples 7 and 8 did not exhibit the property of broad band  $1/4$  wave plate (see [0154], lines 4 to 5 of Arakawa '925; [0156], lines 4 to 5 of Arakawa '925). Any one of ordinary skill in the art would not have a reason or be motivated to combine Arakawa '925 with Arakawa '538 to modify the invention of Arakawa '538 to obtain the desired retardation properties as taught by Arakawa '925.

With respect the assertion by the Examiner described in the paragraph under the reproduced FIG. 9 on page 11 of the Office Action referring to paragraph [0157] of Arakawa '925, it is very clear to one of ordinary skill in the art that "various problems of the foregoing conventional devices" can be solved only by the invention disclosed in Arakawa '925, namely, by using a retardation plate satisfying the relational expression of  $\text{Re}(450) < \text{Re}(550) < \text{Re}(650)$ , but not by using a retardation plate satisfying the relational expression of  $\text{Re}(450) > \text{Re}(550) > \text{Re}(650)$  as shown in FIG. 9 (Comparative Examples 7 and 8) of Arakawa '925.

A reference which leads one of ordinary skill in the art away from the claimed invention cannot render it unpatentably obvious. *Dow Chem. Co. v. American Cyanamid Co.* 816 F2d 617, (CAFC 1987). In determining the scope and content of the prior art, and determining whether the prior art suggested the claimed invention, the references "must be read as a whole and consideration must be given where the references diverge and teach away from the claimed invention." *Akzo N.V. v. United States Int'l Trade Comm'n*, 1 USPQ2d 1241, 1246 (Fed. Cir. 1986); *In re Fine*, 5 USPQ2d 1596, 1598-99 (Fed. Cir. 1988). Known disadvantages in old devices which would naturally discourage the search for new inventions may be taken into account in determining obviousness. *United States v. Adams*, 383, U.S. 39, 52 (1966).

In view of the fact that Arakawa '925 teaches away from the optical laminate according to Claim 1, which satisfies a relation  $\text{Re}(450) > \text{Re}(550) > \text{Re}(650)$ , Rejection (C) is not tenable.

With respect to Rejection (D), claim 19 is rejected under 35 USC 103(a) as being unpatentable over by Arakawa '538 in view of Sasaki.

Applicants respectfully disagree with the rejection for the following reasons.

Applicants consider that the subject matter of claim 18 to which claim 19 depends is not anticipated or obvious based on the arguments set forth above. Therefore, even if the feature disclosed in Sasaki is combined with Arakawa '538, one of ordinary skill in the art cannot arrive at the presently claimed invention. As such, Rejection (D) is not tenable.

Based on the foregoing, reconsideration and withdrawal of Rejections (A)-(D) are respectfully requested.

**New claims 20-26**

The subject matter of new claims 20-26 is further distinguished from the teachings of the cited references.

The subject matter of new claims 20 is nonobvious because the subject matter of claim 12 on which claim 20 depends is nonobvious.

With respect to new claims 21 and 22, none of the cited references teach or suggest that the laminate C is obtained by co-stretching an unstretched resin layer comprising the transparent resin and having substantially no orientation and an unstretched resin layer comprising the resin having a negative intrinsic birefringence, said unstretched resin layer comprising the transparent resin and having substantially no orientation being laminated on at least one face of the layer comprising the resin having a negative intrinsic birefringence. Such a laminate C has an advantage in that it can be obtained much easier than the laminate obtained by stretching each layer individually and laminating the stretched layers.

With respect to new claims 23 and 24, none of the cited references teach or suggest that the unstretched laminate is obtained by a molding process by coextrusion of the resin having a negative intrinsic birefringence and the transparent resin. By coextrusion, the unstretched laminate can be obtained much easier than to laminate two films individually obtained by extrusion.

With respect to new process claims 25 and 26, as the subject matter of claim 1 is new and non-obvious based on the discussions set forth above, the subject matter of these process claims for producing the optical laminate of claim 1 are considered to be new and non-obvious and therefore can be considered patentable.

In summary, the present set of claims is considered to be allowable. Reconsideration is respectfully requested. Allowance is solicited.


In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Garth M. Dahlen, Ph.D., Esq., Reg. No. 43,575 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: September 15, 2009

Respectfully submitted,

By  \_\_\_\_\_

Garth M. Dahlen

Registration No.: 43,575

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant

Annex:

- 1) Abstract (clean version)
- 2) Page 8 of JP 2-256023